Message

Whittier, Robert [Robert.Whittier@doh.hawaii.gov] From:

9/26/2018 10:21:11 PM Sent:

To: Shalev, Omer [Shalev.Omer@epa.gov]; Grange, Gabrielle Fenix [gabrielle.grange@doh.hawaii.gov] CC: Tu, Lyndsey [Tu.Lyndsey@epa.gov]; Pallarino, Bob [Pallarino.Bob@epa.gov]; Linder, Steven

[Linder.Steven@epa.gov]; Matt Tonkin [matt@sspa.com]; g.d.beckett@aquiver.com; Donald Thomas

[dthomas@soest.hawaii.edu]; Ichinotsubo, Lene K [lene.ichinotsubo@doh.hawaii.gov]

Subject: Re: AOC Scoping Meeting

Attachments: Reply from Bob-P_EPA_2-1-16.pdf

Omer,

I would to take this opportunity to point out that I never agreed that Vadose/LNAPL assessment we not critical. Having some basis for the geometry of the LNAPL on the water table is critical to any credible dissolved phase modeling.

Thanks, **BOb W**

From: Shalev, Omer <Shalev.Omer@epa.gov> Sent: Wednesday, September 26, 2018 11:52 AM To: Grange, Gabrielle Fenix; Whittier, Robert

Cc: TU, LYNDSEY; Pallarino, Bob; Linder, Steven; Matt Tonkin; g.d.beckett@aquiver.com; Donald Thomas; Ichinotsubo,

Lene K

Subject: RE: AOC Scoping Meeting

Hi, I spoke with Bob Pallarino about this because he attended all of those scoping meetings and he is copied here on this message.

In brief, the past meeting summaries and Regulatory Agency response to comments received from BWS, there was agreement at the early stages of this project that characterizing the contamination in the vadose zone was not the highest priority. During our initial meetings in late 2015 and 2016 there seemed to be agreement that the groundwater flow model was the priority and installing wells or doing exploratory borings to characterize the extent of the contamination in the vadose zone was deemed an expensive endeavor with little agreement as to how the data that would be obtained would be used.

At some point in the near future, possibly after this letter we're working on goes out, it seems like we may need an internal DOH and EPA call to sort out some issues on fate and transport.

Omer Shalev

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(415) 972-3538

From: Grange, Gabrielle Fenix [mailto:Gabrielle.Grange@doh.hawaii.gov]

Sent: Tuesday, September 25, 2018 6:00 PM

To: Whittier, Robert < Robert. Whittier@doh.hawaii.gov >; Matt Tonkin < matt@sspa.com >;

g.d.beckett@aquiver.com; Donald Thomas <dthomas@soest.hawaii.edu>

Cc: Shalev, Omer <Shalev.Omer@epa.gov>; TU, LYNDSEY <Tu.Lyndsey@epa.gov>

Subject: RE: AOC Scoping Meeting

Thanks. Your historic knowledge keeps coming to the fore on important questions.

From: Whittier, Robert

Sent: Tuesday, September 25, 2018 2:21 PM

To: Matt Tonkin <<u>matt@sspa.com</u>>; <u>g.d.beckett@aquiver.com</u>; Grange, Gabrielle Fenix <<u>Gabrielle.Grange@doh.hawaii.gov</u>>; Donald Thomas <<u>dthomas@soest.hawaii.edu</u>> **Cc:** Shalev, Omer <Shalev.Omer@epa.gov>; TU, LYNDSEY <tu.lyndsey@epa.gov>

Subject: AOC Scoping Meeting

Hi All,

The question has come up in recent conversations regarding what was agreed to during the Nov-Dec 2015 AOC scoping meetings. Most of you were not present at that meeting so I went through my records and put the important documents in a folder "Nov-2015_AOC-SCOPING-MEETING" that is now in the dropbox. Based on the minutes nothing was taken off of the table, but many items were qualified by "not at this time". One thing that did concern me, and goes to GD's concerns, was the lack of vadose zone & LNAPL assessment. I did point that out in an email to Bob P. It was my contention then and still is that for the transport modeling to be credible, vadose zone and LNAPL assessments are needed to develop a source area for the dissolved phase model. MT3D, the selected transport modeling code, only simulates dissolved phase transport. When I did the transport modeling in 2007 I assumed an arbitrary LNAPL source zone. But that is horribly insufficient for TUA decision making.

Thanks,

Bob W.